

I claim:

1. A grappling assembly for a machine having a boom, comprising:
a dipper stick pivotally connectable to said boom;
an implement pivotally connected to said dipper stick;
means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick;
an arm member connected to an underside of said dipper stick, pivotal between an operative position cooperable with said implement for grappling objects between said arm member and said implement when said implement is pivoted toward said arm member, and an inoperative position;
means operatively interconnecting said dipper stick and said arm member for pivoting said arm member between said operative and inoperative positions; and
means for detachably latching said arm member in said operative position including one of said dipper stick and said arm member having at least one recess and the other of said dipper stick and said arm member having a yieldably biased protuberance receivable in said recess when said arm member is in said inoperative position.
2. An assembly according to claim 1 wherein said means for pivoting said arm member is receivable within the envelope of said arm member when said arm member is in said inoperative position.
3. An assembly according to claim 1 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.
4. An assembly according to claim 1 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is yieldingly

biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.

5. An assembly according to claim 1 wherein said latching means includes a bracket mounted on the underside of said dipper stick having a pair of outwardly, yieldingly biased protuberances, and surfaces on said arm member provided with recesses registrable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

6. An assembly according to claim 1 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance in said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

7. An assembly according to claim 1 wherein said arm member is provided with a jagged surface engageable with an object being grappled.

8. An assembly mountable on a dipper stick of a machine having an implement pivotally connected to said dipper stick and means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick, comprising:

an arm member mountable on an underside of said dipper stick for pivotal movement relative to said dipper stick;

means for pivoting said arm member between an inoperative position and an operative position cooperable with said implement when said implement is pivoted relative to said dipper stick toward said arm member to grapple objects between said implement and said arm member;
and

means for detachably latching said arm member in said inoperative position including a first member mountable on one of said dipper stick and said arm member having at least one recess and a second member mountable on the other of said dipper stick and said arm member having a yieldably biased protuberance receivable in said recess when said arm member is in said inoperative position.

9. An assembly according to claim 8 wherein said means for pivoting said arm member is receivable within the envelope of said arm member when said arm member is in said inoperative position.

10. An assembly according to claim 8 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.

11. An assembly according to claim 8 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.

12. An assembly according to claim 8 wherein said latching means includes a bracket mountable on the underside of said dipper stick having a pair of outwardly, yieldably biased protuberances, and surfaces on said arm member provided with recesses registrable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

13. An assembly according to claim 8 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance into said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

14. An assembly according to claim 8 wherein said arm member includes a pair of elongated, transversely spaced, plate members, and wherein said means for pivoting said arm member between an inoperative position and an operative position is received between said plate members when said arm member is in said inoperative position.

15. An assembly according to claim 14 wherein said plate members are provided with jagged surfaces engageable with an object being gripped when said arm member is in said operable position.

16. An assembly according to claim 1 wherein said member having said recess includes an element disposed in a plane perpendicular to the pivotal axis of said arm member and including said protuberance biased in an extended position, engageable with said protuberance in camming relation to cause said protuberance to displace and then be inserted into said recess when said arm member is angularly displaced to said inoperative position.